

Hiroyoshi OHASHI: **The Taxonomic Status of *Aralia cordata* var. *sachalinensis* (*Araliaceae*)**

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Summary: *Aralia cordata* Thunb. var. *sachalinensis* (Regel) Nakai should be included in the typical form, var. *cordata* as a synonym.

Aralia cordata Thunb. was described from Japan and is distributed widely in East Asia. The northern form has often been recorded as var. *sachalinensis* (Regel) Nakai. The variety was described by Regel (1864) as “*A. racemosa* β. *sachalinensis* Rgl.; *robustior, floribus plerumque hexameris*” and illustrated (Fig. 432) a flowering branch with an enlarged young fruit (as “a”) and flower (as “b”). Regel (1864) did not cite any specimens for var. *sachalinensis* in the protologue.

Nakai (1924) newly characterized the variety that “the variety *sachalinensis* differs from the type [i.e., var. *cordata*] in its pubescent calyx. Regel says “Bluthenstiele und Fruchtknoten dicht kurzhaarig.” This Fruchtknoten does not mean ovary but the calyx-tube. In the type the calyx-tube is perfectly smooth.” In Regel’s figure, however, the calyx-tube is entirely glabrous in “a” and “b”. The variety in the sense of Nakai (1924) has been accepted by Hara (1936, 1954), Ohwi (1953, 1965a, 1965b), Ohba (1999) and Yonekura (2012), but was not treated by Kharkevich (1987) and not accepted by Takahashi (2015).

This short note aims to clarify the taxonomic status of the variety.

Regel (1864) and Nakai (1924) distinguished var. *sachalinensis* from their mother species by the larger plant size. The plant size is variable and useless for distinction of the variety. Regel adopted hexamerous floral composition, but the

character is within variation range of the species. Characters adopted by Regel are useless for circumscription of the variety.

Nakai found a form with pubescent calyces as a diagnostic character distinguishing it from the typical form. *Aralia cordata* has, however, an always tomentose pedicel, and flowers with the calyx glabrous or sometime pubescent when younger. Features of the calyx-tube are kept in mature flowers and young fruits. Mature fruits are all entirely glabrous. When the calyx-tube is pubescent, density of the pubescence is scarce, and never densely hairy as in the pedicel. The calyces of *Aralia cordata* are generally glabrous or sometimes scarcely pubescent.

The species is distributed in Sakhalin, Kuriles, Hokkaido, Honshu, Shikoku, Kyushu, the Ryukyus, Korea, Taiwan, and China. Specimens having the pubescent calyx-tube were found in Sakhalin, common in Hokkaido, rarely in Honshu (sometimes in northern Honshu and Hokuriku regions) and rarely in Kyushu so far as those examined in TUS (these specimens are cited under the names below). On the other hand, specimens having a glabrous calyx-tube were distributed sporadically throughout the whole range. The plants with a pubescent calyx are found more frequently in Hokkaido and northwards than Honshu and southwards. In fact, Nakai (1924) cited only two specimens for var. *sachalinensis*: “Yeso: in declivitate Senibako, *T. Nakai*” and “Saghalin: sine loco speciali, *Migul*”.

Based on the observation mentioned above, var. *sachalinensis* (Regel) Nakai is considered as indistinct from the commonest form within the

species.

Aralia cordata Thunb., Fl. Jap.: 127 (1784); Nakai in J. Arn. Arb. **5**: 28 (1924); Ohwi, Fl. Jap.: 829 (1953), ed. Engl.: 662 (1965); E. Walker, Fl. Okinawa: 787 (1976); Kljuykov & Tikhomirov in Kharkev., Pl. Vasc. Or. Extr. Soviet. **2**: 201, t. 21 D (1987); H. Ohashi & S. Y. Lu, Fl. Taiwan ed. 2, **3**: 990 (1993); W. T. Lee, Lineam. Fl. Kor. **1**: 771 (1996); C. B. Shang & Lowry, Fl. China **13**: 488 (2007); Hideki Takahashi, Pl. Kulril: 358 (2015).

A. racemosa var. *sachalinensis* Regel in Gartenfl. **13**: 100, t. 432 (1864).

A. cordata var. *sachalinensis* (Regel) Nakai in J. Arn. Arb. **5**: 29 (1924); H. Hara in Bot. Mag. (Tokyo) **50**: 364 (1936), & Enum. Spermatoph. Jap. **3**: 281 (1954); Ohwi, Fl. Jap.: 829 (1953); Kitam. & Murata, Col. Illust. Herb. Pl. Jap. **2**: 33 (1961); Ohwi, Fl. Jap. ed. Engl.: 662 (1965); H. Ohba in K. Iwats. & al., Fl. Jap. **2c**: 260 (1999); Yonek., Enum. Vasc. Pl. Jap.: 228 (2012).

Specimens with pubescent calyces examined (all in TUS): **Sakhalin**. Between Khazarskoye and Khwalisekoye Lak. 8 Aug. 1996. S. Tsuji & al. s.n. (TUS 335804). **Hokkaido**: Hidaka Division. 17 Aug. 1996. Yamaji 1634 (TUS 374228, 374227), Yamaji 1633 (374229); Hiyama Division. 5 Sep. 2009. Yonekura 16797 (TUS 398195, 398196, 398197), 3 Sep. 2009. Yonekura 16703 (TUS 399389); Ishikari Division. 9 Sep. 1981. Takahashi & al. 1824 (TUS 69562); Kushiro Division. 13 Aug. 1988. Takehara & Nemoto 7117 (TUS 136743, 136744); Shiribeshi. 3 Aug. 1984. Hoshi & al. 1161-1 (TUS 108938); 5 Aug. 1983. Takahashi & al. 75 (TUS 89057). **Honshu**. [Tohoku Distr.] Aomori Pref. Asamushi. 15 Aug.

1926. Tahara s.n. (TUS 28176), between Sarukura. 12 Aug. 2000. Yonekura 6008 (TUS 251199; Miyagi Pref. Naito & Ishikawa s.n. 24 Aug. 1977 (TUSG); Yamagata Pref. C. Suzuki s.n. 13 Aug. 1938 (TUS164928), Nemoto 1749. 6 Aug. 1983. (TUS 89742); Fukushima Pref. 25 Aug. 1985. Ohashi & al. 21950 (TUS 123266), Shiozawa 28 Aug. 1983. Iketani 1089 (TUS 138743); Iwate Pref. 19 Aug. 1935. Iwabuchi 5266 (TUS 51542), Yonekura 7369. 24 Aug. 2001. (TUS 274998). [Hokuriku Distr.] Toyama Pref. 13 Aug. 1983. Hoshi & Nagakawa 862 (TUS 138896). Nagano Pref. Mt. Togakushi. 15 Aug. 1981. Simoda 116 (TUS 102446). **Kyushu**. Nagasaki Pref. 5 Sep. 2001. Yonekura 7495 (TUS 270373).

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大橋広好：ウコギ科カラフトウドの実体

ウドは花柄にビロード毛があり、花柄の先端に花が分化するが萼は無毛で、果実も無毛である。ときに萼にも花柄の毛と似た種類の毛がまばらにあり、中井 (1924) はこの形をカラフトウド (エゾウド) としてウドから区別した。北海道とサハリンの標本による。TUSの標本で見た限りでは北海道にふつうで (多分サハリンも同様)、ときに東北にあり、まれに富山県、長野県戸隠山と長崎県 (Yonekura 7495 [TUS 270373]) にもあった。

サハリンにも萼が無毛の形がある (Sakhalin, Maoka 真岡 (Kholmsk), [ca.14204E, 4703N]. 30 Jul. 1931. Mt. Hakkoda Botanical Lab. Sakhalin Expedition No. 6. [TUS 37808]). カラフトウドは単なる萼毛の変異形であると思われる、分類群として認められない。

北海道大学総合博物館高橋英樹教授に文献を見せていただいた。お礼申し上げる。

(東北大学植物園津田記念館)